

ABSTRACT

In a semiconductor storage device, a gate insulating film (12) and a gate electrode (13) are laid on a first conductivity type semiconductor substrate (11), and charge holding portions (10A, 10B) are formed on both sides of the gate electrode (13). Second conductivity type first and second diffusion layer regions (17, 18) are formed in regions of the semiconductor substrate (11) corresponding to the charge holding portions (10A, 10B). The charge holding portions (10A, 10B) are each structured so as to change, in accordance with an electric charge amount held in the charge holding portions, a current amount flowing from one of the second conductivity type diffusion layer regions (17, 18) to the other of the diffusion layer regions through a channel region when voltage is applied to the gate electrode (13). Part of each charge holding portion (10A, 10B) is present below an interface of the gate insulating film (12) and the channel region.